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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,635	07/19/2006	Masato Kaneko	292229US0PCT	6052
22850	7590	09/22/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
OLADAPO, TAIWO				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
09/22/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
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### Office Action Summary

**Application No.**

10/586,635

**Applicant(s)**

KANEKO, MASATO

**Examiner**

TAIWO OLADAPO

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/02)  
Paper No(s)/Mail Date 7/19/2006/10/6/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawahara et al. (US 2006/0019840)

3. In regards to claim 1, Kawahara teaches a lubricating oil composition for oil impregnated sintered bearings or sizing oils [0001] having a kinematic viscosity of from 5 – 10 mm<sup>2</sup>/s at 40 °C [0053]. Kawahara teaches that the oil contains an extreme pressure agent comprising from 0.1 to 5% by weight of lubricating oil [0200], and a thiadiazole-based metal deactivators comprising from 0.01 to 0.4 % by weight of the lubricating oil [0201].

4. In regards to claim 2, Kawahara teaches the lubricating oil, wherein the extreme-pressure agent are phosphates (esters of phosphoric acid) such as dioctyl phosphate or zinc dialkyldithio phosphate which are organic phosphate ester [0200] and the metal deactivator is thiadiazole as previously stated.

5. In regards to claim 3, Kawahara teaches the lubricating oil further comprising antioxidants [0197].

6. In regards to claim 4, Kawahara teaches the lubricating oil comprising organic phosphate extreme-pressure agents such as dioctyl phosphates which contains two octyl (C<sub>8</sub>) groups, or 16 carbon atoms [0200].
7. In regards to claim 5, Kawahara teaches the lubricating oil comprising phosphite esters such as dibutyl phosphate [0200].

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al. (US 2006/0019840) in view of Huang (US 2003/0219180)

11. In regards to claim 6, Kawahara teaches the lubricating oil is used for oil impregnation or sizing of bearings as previously stated. Kawahara does not specifically recite alloyed bearings.

Huang is added to teach that oil impregnated bearings as used in the invention of Kawahara are made of alloys [0003]. Huang teaches that the bearings are mainly made from metals such as iron, copper, and iron-copper alloys.

It would have been obvious for one of ordinary skill in the art at the time of the invention to use the lubricating oil of Kawahara for sintered alloy oil impregnated bearing according to Huang who teaches that the bearings are made from metals and metal alloys.

12. Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al. (US 2006/0019840) in view of Cubberly et al. *Tool and Manufacturing Engineer's Handbook*

13. In regards to claim 7, Kawahara provides for the method of preparing oil impregnated bearings, by teaching lubricating oils for sizing of oil impregnated bearings as previously stated. Kawahara, however, does not teach that the bearings are degreased before impregnation of bearing oil.

Cubberly teaches the process of preparing oil impregnated bearings taught in the invention of Kawahara. Cubberly teaches heat treatment of bearings to provide clear open pores increase penetration during impregnation of bearing oil (*Tool and Manufacturing Engineer's Handbook: Impregnation and Infiltration*, page 407).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the method taught by Cubberly in preparing the oil impregnated bearings used according to the invention of Kawahara, as Cubberly teaches it is advantageous to degrease to increase penetration during impregnation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAIWO OLADAPO whose telephone number is (571)270-3723. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TO

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797